

IN THE CLAIMS

Claim Status

Claims 1 - 38, 40 and 42 (cancelled without prejudice or disclaimer).

Claim 49 (new) In an industrial process including a central control unit, a bus and a plurality of field devices connected to the central control unit via the bus, a simulation arrangement including:

a software apparatus model associated with at least one of the field devices, said software apparatus model being a mimic image of the field device with which said software apparatus model is associated, including parameters, functionalities and programs of the field device with which said software apparatus model is associated, wherein:

said software apparatus model is stored in the field device with which said software apparatus model is associated,

said software apparatus model is loadable via the bus in the central control unit, and

the central control unit being provided with the parameters, functionalities and programs of the field device with which said software apparatus model is associated, so that the field device with which said software apparatus model is associated can be simulated in the central control unit.

Claim 39 (presently amended) The apparatus simulation arrangement as defined in claim 38 49, wherein:

said the software of said software apparatus model is formulated in a uniform program language with which said functionality and said parameters of apparatus field device with which said software apparatus is associated can be explicitly simulated in the central control

Claim 41 (presently amended) The ~~apparatus~~ simulation arrangement as defined in claim ~~38~~ 49, further ~~having~~ including :

a data carrier, wherein:

said software is memorizable on said data carrier and usable by a software program in the central control unit.

Claim 50 (new) A plant including:

a central control unit, a bus and a plurality of apparatuses connected to the central control unit via the bus; and

a simulation arrangement having an apparatus model associated with each apparatus, said apparatus model having memorized software which is a specification of the apparatus containing a mimic image including parameters, functionalities and programs of the apparatus, wherein:

the software of each apparatus being loadable into said central control unit so that the operation of the plant can be simulated by testing all parameters and functionalities in said software.

Claim 43 (presently amended) The plant as defined in claim ~~42~~ 50, wherein:

said software are modifiable by said central control unit depending on the result of simulation.

Claim 44 (presently amended) A method of simulating the operation of a plant including a central control unit, a bus and at least one apparatus having memorized software which is a specification of the apparatus containing a mimic image of the apparatus, the mimic image including parameters, functionalities and programs of the apparatus, ~~a bus and a central control unit connected to each apparatus via said bus~~, comprising the steps of:

loading the software of the apparatuses to be employed in the plant into the central control unit; and

simulating the operation of the plant by including all parameters and
functionalities contained in the software by means of a software program sequence in the control unit

Claim 45 (previously presented) The method as defined in claim 44, further comprising the step of:

modifying any apparatus by the central control unit as a function of the result of said simulation.

Claim 46 (presently amended) A control unit ~~and a bus, connected to at least one apparatus~~ used in an industrial process connected via said a bus to at least one apparatus of the industrial process, comprising: wherein said control unit

means memorizing a software, said software being a specification of said at least one apparatus containing a mimic image of said at least one apparatus including parameters, functionanlities and programs of said at least one apparatus, said software providing said control unit with said specification of said at least one apparatus.

Claim 47 (presently amended) The control unit as defined in claim 46, wherein said software is loaded from said apparatus into said ~~central~~ control unit via said bus.

Claim 48. (previously presented) The control unit as defined in claim 47, wherein said control unit is connected via said bus with a plurality of apparatuses used in said industrial procedd.